ENGINEERING & UTILITIES

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Larry Loverme	Larry Muench
COMPANY:	DATE:
Cambridge DPW	October 27, 1998
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
617-349-4868	10
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
617-349-4848	
RE:	YOUR REFERENCE NUMBER:
Harvard University Storm Drain Project	

☐ FOR YOUR INFORMATION ☒ FOR REVIEW ☒ PLEASE COMMENT ☐ PLEASE REPLY

NOTES/COMMENTS

Larry,

Attached please find the storm drainage test results for the Emerson/Robinson Storm Drainage Project taken 10-14-98.

Test samples were taken at the same three locations as the previous test (Robinson 0+00, Pusey Forced Main, Pusey Sump) and the results for this test were very favorable. The Fecal Coliform count at all three locations were below the 200-cfu/100ml limit.

For these tests, EST used a sterile sample collection tube at each test location, three tubes in all. The tubes, which resembled two-foot long fluorescent light bulbs, were in sealed plastic packages from the supplier. I felt that these collection containers were a vast improvement in terms of sterilization to the past containers used for previous tests. However, the configuration of these tubes made it very difficult to obtain a large sample at Robinson 0+00 where the water level was very low, and at the Pusey Forced Main where the water discharged from the 4 inch pipe at a high flow rate. The collector obtained only enough water for a fecal coliform test at Robinson 0+00, and only enough water for fecal coliform and total coliform tests at Pusey forced main. A large enough quantity was obtained at Pusey Sump to perform all three tests.

I will schedule the next series of tests for sometime in mid-November, and will contact you with the planned date. I am planning to use a different sampling agency and testing lab as the new collection devices used by EST are not well suited to my test sources. Please call me if you have any questions on these test results or if you have any other questions.

50 CHURCH STREET, 4TH FLOOR, CAMBRIDGE, MA 02138
TEL. 617.496.5090 FAX 617.496.1669

Page 1 TOXIKON CORP. REPORT Work Order # 98-10-276
Received: 10/14/98 10/21/98 14:07:54

REPORT TO: HARVARD UNIVERSITY ENG.
50 CHURCH STREET, 4TH FLOOR
CAMBRIDGE, MA 02139
617-495-5560
ATTEN LARRY MUENCH

PREPARED BY: TOXIKON CORPORATION
15 WIGGINS AVE
BEDFORD, MA 01730
ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY
CONTACT JAYSON

CLIENT HARVARD UNIV SAMPLES 3
COMPANY HARVARD UNIVERSITY ENG
FACILITY 50 CHURCH STREET, 4TH FLOOR
CAMBRIDGE, MA 02139

MA CERT # M-MA064: TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST.,NUTRIENTS. DEMAND. O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

WORK ID HARVARD UNIV. CONSTRUCTION
TAKEN 10/14/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY:
CERT#MMA064

SAMPLE IDENTIFICATION

01 ROBINSON 0+00
02 PUSEY SUMP
03 PUSEY FORCE MAIN

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLI TOTAL COLI (COLILERT)

Page 2 TOXIKON CORP. REPORT Work Order # 98-10-276
Received: 10/14/98 Results by Sample

SAMPLE ID ROBINSON 0+00 FRACTION 01A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 10/14/98 13:10:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 10/15/98
UNITS = cfu / 100ml

Page 3 TOXIKON CORP. REPORT Work Order # 98-10-276
Received: 10/14/98 Results by Sample

SAMPLE ID PUSEY SUMP SAMPLE # 02 FRACTIONS: A
Date & Time Collected 10/14/98 13:45:00 Category WATER

N_AMM ND
mg/L DL=0.04

Page 4 TOXIKON CORP. REPORT Work Order # 98-10-276
Received: 10/14/98 Results by Sample

SAMPLE ID PUSEY SUMP FRACTION 02A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 10/14/98 13:45:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	60

Notes and definitions for this report:
TEST DATE: 10/15/98
UNITS = cfu / 100ml

Page 5 TOXIKON CORP. REPORT Work Order # 98-10-276
Received: 10/14/98 Results by Sample

SAMPLE ID PUSEY SUMP FRACTION 02A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 10/14/98 13:45:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	300

Notes and definitions for this report:
TEST DATE: 10/15/98
UNITS = cfu / 100ml

Page 6 TOXIKON CORP. REPORT Work Order # 98-10-276
Received: 10/14/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN FRACTION 03A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 10/14/98 13:25:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	10

Notes and definitions for this report:
TEST DATE: 10/15/98
UNITS = cfu / 100ml

Page 7 TOXIKON CORP. REPORT Work Order # 98-10-276
Received: 10/14/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN FRACTION 03A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 10/14/98 13:25:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	110

Notes and definitions for this report:
TEST DATE: 10/15/98
UNITS = cfu / 100ml

TEST CODE F COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater.
APHA-AWWA-WACF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N_AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes.
EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T COLI NAME TOTAL COLI (COLILERT)

METHOD:PRESENCE-ABSENCE (P-A) COLIFORM TEST

Reference: Based on procedures set forth in Standard Methods for the Examination
of Water and Wastewater, APHA-AWWA-WACF, 18th Edition, 1992. APHA
Washington D.C.

98-10-276

Chain of Custody Record

Laboratory: Toxikon (781) 275-3330

EST ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency: ☐ Rush ____Day Turnaround ☐ Routine

WORK ORDER #: 98.10.276
DUE DATE: 10.28.98

Client: Harvard University Engineering & Utilities
Address: 50 Church Street, 4th Floor
Cambridge MA 02139-

Contact Name: Larry Muench
Phone Number: (617) 495-5560
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative	Analysis	Comments
(1) ROBINSON 0+00	1	125 ml	B	2	10/14	1310	None	~~Total Coliform~~, Fecal Coliform	pH= 8.06
	~~1~~	~~1 L~~	~~P~~	~~1~~	10/14	1310	~~H2SO4~~	~~NH3~~	Temp= 15.7°C
(2) PUSEY SUMP	1	125 ml	B	2		1325 1345	None	Total Coliform, Fecal Coliform	pH= 7.62
(3)	1	1 L	P	1		1325 1345	H2SO4	NH3	Temp= 17.7°C
(4) PUSEY FORCE MAIN	1	125 ml	B	2		1345 1325	None	Total Coliform, Fecal Coliform	pH= 7.79
	~~1~~	~~1 L~~	~~P~~	~~1~~	V	1345	~~H2SO4~~	~~NH3~~	Temp= 16.5°C

SAMPLER'S SIGNATURE	DATE	TIME	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
Greg Cataldo	10/14/98	1315	1	Greg Cataldo	A. Marlow	10-14-98	17:20
			2				
			3				
			4				
			5				

Additional Comments:
Site Contact: Jim Smith, Cell: (617) 839-1638

(R-T)

** All samples chilled to 4 degrees Celsius.*

10/27/98 17:17 6174961669 ENG & UTIL 010

recd from Larry Muench on Sept 2, 1998

Test Results #5

TOXIKON

ISO-9001 Certified
Celebrating 20 Years of Excellence

FACSIMILE INSTRUCTION SHEET

Date: 9/1/98

Name: Andrew Wilcox

Company: Joseph P. McCabe

Fax #:

From: Yun Correia

Total No. of Pages Including Cover Sheet: 16

If you do not receive all of the pages, please call (617) 275-3330. Thank you. Notes:

STATEMENT OF CONFIDENTIALITY

This facsimile transmission contains information from Toxikon. The information contained is confidential and/or privileged, and it is intended only for the use of the addressee named on the transmittal sheet. If you are not the intended addressee, please note that any disclosure, copying, distribution or use of this faxed information is prohibited. If you received this facsimile in error, please notify us immediately by telephone, so that we can arrange to retrieve the original documents without cost to you.

REMEMBER! CONTACT US IMMEDIATELY IF YOU ARE NOT THE INTENDED RECIPIENT.

15 Wiggins Avenue • Bedford, Massachusetts 01730
(781) 275-3330

98-08-577

Chain of Custody Record

EST ENVIRONMENTAL SAMPLING TECHNOLOGY
Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Laboratory: Toxikon (781) 275-3330

Container Type: P - Plastic; G - Glass; V - VOA; B - Bacteria

Sample Type: 1. Wastewater; 2. Groundwater; 3. Soil; 4. Drinking Water; 5. Surface Water; 6. Other _____

Sampling Frequency: ☐ Rush _____ Day Turnaround ☐ Routine

Client: Joseph P. McCabe, Inc.
Address: 509 East First Street
South Boston MA 02127-

Contact Name: Andrew McCabe
Phone Number: (617) 268-2030
Description: Harvard University Construction

WORK ORDER #: 98.08.577
DUE DATE : 09-11-98

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative	Analysis	Comments
(1) Rusey Sump	1	125 ml	B	2	8/28	1130	None	Total Coliform, Fecal Coliform	pH= 7.28
(2) " "	1	1 L	P	1	"	"	H2SO4	NH3	Temp= 68°F
(3) Rusey Force Main	1	125 ml	B	2	8/28	1140	None	Total Coliform, Fecal Coliform	
(4)	1	1 L	P	1	"	"	H2SO4	NH3	pH= 7.37
(5) Robinson 0700	1	125ml	B	2	8/28	1200	None	T. Col., Fecal Col.	Temp= 69°F
(6) "	1	1L	P	1	"	"	H_2SO_4	NH_3	pH= 7.61
(7) Canady	1	125ml	B	2	8/28	1210	None	T. Col, Fecal Col	Temp= 67°F
(8) "	1	1L	P	1	"	"	H_2SO_4	NH_3	pH= 9.21
									Temp= 65°F

SAMPLER'S SIGNATURE	DATE	TIME	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
Joe D'Andrea	8/28/98	1300	1	Joe D'Andrea	A. Mackie	8-28	13:15
			2				
			3				
			4				
			5				

Additional Comments:
Site Contact: Jim Smith, Cell: (617) 839-1636

* All samples chilled to 4 degrees Celsius.

SEP-01-1998 12:25 MCCABE COMPANIES 617 268 7498 P.02

Page 1
Received: 08/28/98

TOXIKON CORP. REPORT
09/01/98 09:06:09

Work Order # 98-08-577

REPORT JOSEPH P. McCABE,INC
TO 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127
617-268-2050
ATTEN ANDREW McCABE

PREPARED TOXIKON CORPORATION
BY 15 WIGGINS AVE
BEDFORD, MA 01730

ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY

CONTACT JOHNN

CLIENT MCCABE SAMPLES 8
COMPANY JOSEPH P. McCABE,INC
FACILITY 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127

MA CERT # M-MA066; TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Cu, TOTAL ALK., TDS, pH, TNHs, VOC, PEST., NUTRIENTS, DEMAND, O&G, PHENOLICS, PCBs , CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C,

WORK ID HARVARD UNIVERSITY CONSTRUC
TAKEN 8/28/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY: Douglas Healy

SAMPLE IDENTIFICATION

01 PUSEY SUMP
02 PUSEY SUMP
03 PUSEY FORCE MAIN
04 PUSEY FORCE MAIN
05 ROBINSON 0+00
06 ROBINSON 0+00
07 CANADY
08 CANADY

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLI TOTAL COLI (COLILERT)

Page 2
Received: 08/28/98

TOXICON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUMEY PUMP

FRACTION 01A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 11:30:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	90

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 3
Received: 08/28/98

YORKTOWN CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUSEY SUMP

FRACTION DIA TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 11:30:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	54000

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 6
Received: 08/28/98

TOXICON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUMEY SUMP SAMPLE # 02 FRACTIONS: A
Date & Time Collected 08/28/98 11:30:00 Category WATER

M_ARR ND
MG/L DL=0.04

Page 5
Received: 08/28/98

TOXICON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PLEASY FORCE MAIN

FRACTION 03A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 11:40:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	1530

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 6
Received: 08/28/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUMEY FORCE MAIN FRACTION WSA TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 11:40:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	16000

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

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Received: 08/28/98

TOXICON CORP. REPORT

Results by Sample

Work Order # 98-08-577

SAMPLE ID PUSEY FORCE MAIN SAMPLE # 06 FRACTIONS: A

Date & Time Collected 08/28/98 11:40:00 Category WATER

N_NH3 ND

mg/L DL=0.06

Page 8
Received: 08/28/98

TORTRON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID ROBINSON 0+00

FRACTION DSA TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 12:00:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	420

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

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Received: 08/28/98

TOXICON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID [redacted] 0+00

FRACTION 05A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 12:00:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	61000

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 10 TOXICON CORP. REPORT Work Order # 98-08-577
Received: 08/28/98 Results by Sample

SAMPLE ID [redacted] SAMPLE # 06 FRACTIONS: A
Date & Time Collected 08/28/98 12:00:00 Category WATER

[redacted] ND
mg/L DL=0.06

Page 11
Received: 08/28/98

TOXICON CORP. REPORT Work Order # 98-08-577
Results by Sample

SAMPLE ID CANADT FRACTION 07A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 12:10:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 12
Received: 08/28/98

TORTIKOM CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID CARADT FRACTION D7A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 12:10:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	80

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 13 TOXICON CORP. REPORT Work Order # 98-08-577
Received: 08/28/98 Results by Sample

SAMPLE ID CANADY SAMPLE # 05 FRACTION: A
Date & Time Collected 08/28/98 12:10:00 Category WATER

N_NH4 0.068
MG/L DL=0.04

Page 14 TOXIKON CORP. REPORT Work Order # 98-08-577
Received: 08/28/98 Test Methodology

TEST CODE F COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T COLI NAME TOTAL COLI (COLILERT)

METHOD:PRESENCE-ABSENCE (P-A) COLIFORM TEST

Reference: Based on procedures set forth in Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WPCF, 18th Edition, 1992. APHA Washington D.C.

rec'd Thursday Aug 22, 1998 from Larry Meutch and Jim Smith Test Results # 4

Transmittal Form

Joseph P. McCabe, Inc.
509 East First Street
So. Boston, MA 02127
617-268-2030

Date: 8-27-98
Company: Harvard University
Attention: Larry Meutch
From: Jim Smith
Project name: Emerson/Robinson Drainage

Regarding: Storm Water Testing --- Test of 8-24-98

We are sending you:

	Copies	Date	Description
☐ As requested			
■ Attached			
☐ Under separate cover			

For your:

- ☐ Records
- ■ Use and information
- ☐ Approval
- ☐ Review and comment
- ☐ Use and distribution

Memo:

Via:

- ☐ Overnight mail
- ☐ Mail
- ■ Hand delivered
- ☐ Fax

Remarks:

Telefax number:

Copies to: File – Larry LeVerme

Number of pages (including this page):

Thanks – Jim Smith

Page 1
Received: 08/24/98

TOXIKON CORP. REPORT
08/26/98 12:29:22

Work Order # 98-08-460

REPORT TO
JOSEPH P. McCABE,INC
509 EAST FIRST STREET
SOUTH BOSTON,MA 02127
617-268-2030
ATTEN ANDREW McCABE

PREPARED BY
TOXIKON CORPORATION
15 WIGGINS AVE
BEDFORD, MA 01730
ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY

CONTACT JOHNM

CLIENT MCCABE SAMPLES 4
COMPANY JOSEPH P. McCABE,INC
FACILITY 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127

MA CERT # M-MA064: TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST.,NUTRIENTS, DEMAND, O&G, PHENOLICS, PCBs , CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

WORK ID HARVARD UNIVERSITY CONST.
TAKEN 8/24/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY:

SAMPLE IDENTIFICATION

01 ROBINSON 0+00 1
02 ROBINSON 0+00 2
03 PUSEY FORCE MAIN 3
04 PUSEY FORCE MAIN 4

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLI TOTAL COLI (COLILERT)

Page 2
Received: 08/24/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-460

SAMPLE ID ROBINSON 0+00 1 FRACTION 01A TEST CODE F_COLI NAME FECAL COLIFORM
Date & Time Collected 08/24/98 10:30:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	120

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

Page 3
Received: 08/24/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-460

SAMPLE ID ROBINSON 0+00 1 FRACTION 01A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/24/98 10:30:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	11200

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

Page 4 TOXIKON CORP. REPORT Work Order # 98-08-460
Received: 08/24/98 Results by Sample

SAMPLE ID ROBINSON 0+00 2 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 08/24/98 10:30:00 Category WATER

N_AMM 0.621
g/L DL=0.04

Page 5
Received: 08/24/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-460

SAMPLE ID PUSEY FORCE MAIN 3 FRACTION 03A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/24/98 10:45:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	890

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

Page 6
Received: 08/24/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-460

SAMPLE ID PUSEY FORCE MAIN 3 FRACTION 03A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/24/98 10:45:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	27800

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

Page 7
Received: 08/24/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-460

SAMPLE ID PUSEY FORCE MAIN 4 SAMPLE # 04 FRACTIONS: A
Date & Time Collected 08/24/98 10:45:00 Category WATER

N_AMM 0.208
mg/L DL=0.04

Received: 08/24/98 TOXIKON CORP. REPORT Work Order # 98-08-460
Test Methodology

TEST CODE F_COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater. APHA-AWWA-WACF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N_AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T_COLI NAME TOTAL COLI (COLILERT)

METHOD:PRESENCE-ABSENCE (P-A) COLIFORM TEST

Reference: Based on procedures set forth in Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WACF, 18th Edition, 1992. APHA Washington D.C.

98-08-460

Chain of Custody Record

EST ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Laboratory: Toxikon
(781) ~~275~~-3330

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency:
☒ Rush
2 Day Turnaround
☐ Routine

Client: Joseph P. McCabe, Inc.
Address: 509 East First Street
South Boston MA 02127-

Contact Name: Andrew McCabe
Phone Number: (617) 268-2030
Description: Harvard University Construction

WORK ORDER #: 98.08.460
DUE DATE: 08.26.98

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative *	Analysis	Comments
ROBINSON Ø+ØØ(1)	1	125 ml	B	2	8/24/98	1130	None	Total Coliform, Fecal Coliform	pH= 7.10
ROBINSON Ø+ØØ(2)	1	1 L	P	1	"	"	H2SO4	NH3	Temp= 18.8C
POSEY FORCEMAIN (3)	1	125 ml	B	2	8/24/98	1045	None	Total Coliform, Fecal Coliform	pH= 7.10
POSEY FORCEMAIN (4)	1	1 L	P	1	"	"	H2SO4	NH3	Temp= 17.5°C

SAMPLER'S SIGNATURE	DATE	TIME
[signature]	8/24/98	1107

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	[signature]	[signature]	8-24	13:25
2			98	
3				
4				
5				

Additional Comments:
Site Contact: Jim Smith, Cell: (617) 839-1638

* All samples chilled to 4 degrees Celsius.

FROM : TOXIKON PHONE NO. : 6172711135 Aug. 26 1998 03:21PM P10

rec'd from Jim Smith and Larry Muench on Tues Aug 25, 1998
Test #3 results

Transmittal Form

Joseph P. McCabe, Inc.
509 East First Street
So. Boston, MA 02127
617-268-2030

Date: 8-25-98
Company: Harvard Univ.
Attention: Larry Meutch
From: Jim Smith
Project name: Emerson/Robinson Drainage

Regarding: Water Testing

We are sending you:

- ☐ As requested
- ■ Attached
- ☐ Under separate cover

Copies	Date	Description
1	8-24-98	Test Results

For your:

- ■ Records
- ■ Use and information
- ☐ Approval
- ☐ Review and comment
- ☐ Use and distribution

Memo:

Via:

- ☐ Overnight mail
- ☐ Mail
- ■ Hand delivered
- ☐ Fax

Remarks:

Telefax number:

Number of pages (including this page):

Copies to: File – Larry LaVerme

Thanks – Jim Smith

TOXIKON

ISO-9001Certified
Celebrating 20 Years of
Excellence

FACSIMILE INSTRUCTION SHEET

Date: 8/24

Name: Andrew McCabe

Company:

Fax #:

From: Lynn C.

Total No. of Pages Including Cover Sheet: 7

If you do not receive all of the pages, please call (617) 275-3330.
Thank you. Notes:

STATEMENT OF CONFIDENTIALITY

This Facsimile transmission contains information from Toxikon. The information contained is confidential and/or privileged, and it is intended only for the use of the addressee named on the transmittal sheet. If you are not the intended addressee, please note that any disclosure, copying, distribution or use of this faxed information is prohibited. If you received this facsimile in error, please notify us immediately by telephone, so that we can arrange to retrieve the original documents without cost to you.

REMEMBER! CONTACT US IMMEDIATELY IF YOU ARE NOT THE INTENDED RECIPIENT.

15 Wiggins Avenue • Bedford, Massachusetts 01730
(781) 275-3330

Page 1
Received: 08/18/98

TOXIKON CORP. REPORT
08/21/98 09:55:12

Work Order # 98-08-331

REPORT JOSEPH P. McCABE, INC
TO 509 EAST FIRST STREET
SOUTH BOSTON, MA 02127
617-268-2030
ATTEN ANDREW McCABE

PREPARED TOXIKON CORPORATION
BY 15 WIGGINS AVE
BEDFORD, MA 01730

ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY

CONTACT JOHNM

CLIENT MCCABE SAMPLES 2
COMPANY JOSEPH P. McCABE, INC
FACILITY 509 EAST FIRST STREET
SOUTH BOSTON, MA 02127

WORK ID HARVARD UNIVERSITY CONSTRUCT
TAKEN 8/18/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

MA CERT # M-MA064; TRACE METALS, SULFATE, CYANIDE, RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST., NUTRIENTS, DEMAND, O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

VERIFIED BY:

SAMPLE IDENTIFICATION

01 ROBINSON COLLECTOR GRAB 1
02 ROBINSON COLLECTOR GRAB 2

TEST CODES and NAMES used on this workorder

F COLI	FECAL COLIFORM
N AMM	NITROGEN AMMONIA
T COLI	TOTAL COLI (COLILERT)

Page 2
Received: 08/18/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-331

SAMPLE ID ROBINSON COLLECTOR GRAB 1 FRACTION 01A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/18/98 08:00:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	2510

Notes and definitions for this report:
TEST DATE: 08/18/98
UNITS = cfu / 100ml

Page 3
Received: 08/18/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-331

SAMPLE ID ROBINSON COLLECTOR GRAB 1 FRACTION 01A TEST CODE T_COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/18/98 08:00:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	112000

Notes and definitions for this report:
TEST DATE: 08/18/98
UNITS = cfu / 100ml

Page 4
Received: 08/18/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-331

SAMPLE ID ROBINSON COLLECTOR CRAB 2 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 08/18/98 08:00:00 Category WATER

N_AMM ND
mg/L DL=0.04

98-08-331

Chain of Custody Record

EST
ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Laboratory: Toxikon (781) 275-3330

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency: ☐ Rush _____ Day Turnaround ☒ Routine

WORK ORDER #: 98.08.331
DUE DATE: 08.31.98

ent: Joseph P. McCabe, Inc.
dress: 509 East First Street
South Boston MA 02127-

Contact Name: Andrew McCabe
Phone Number: (617) 268-2030
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative	Analysis	Comments
inson Collector Grab (1)	1	125 ml	B	2	7/18	800	None	Total Coliform, Fecal Coliform	pH= 7.45
inson Collector Grab (2)	1	1 L	P	1	"	"	H2SO4	NH3	Temp=24.7°C

SAMPLER'S SIGNATURE	DATE	TIME	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
	7/15/98	810	1		A. Morlas/LAB	8/8/98	12:40
			2				
			3				
			4				
			5				

litional Comments:
Contact: Jim Smith, Cell: (617) 839-1638

*All samples chilled to 4 degrees Celsius.

PHONE NO. : 6172711135 Aug. 24 1998 10:02AM P6

Test #2 Results

Transmittal Form

Larry Muench gave this to L LaVerme through Jim Smith of McCabe on Friday Aug 21, 1998

Joseph P. McCabe, Inc.
509 East First Street
So. Boston, MA 02127
617-268-2030

Date: 8-15-98
Company: Harvard Univ.
Attention: Larry Meutch
From: Jim Smith
Project name: Emerson/Robinson Drainage

Regarding: _____

We are sending you:

	Copies	Date	Description
☐ As requested			
■ Attached	1	8-14-98	Toxikon Test Results –
☐ Under separate cover			

For your:

- ■ Records
- ■ Use and information
- ☐ Approval
- ☐ Review and comment
- ☐ Use and distribution

Memo: _____

Via:

- ☐ Overnight mail
- ☐ Mail
- ■ Hand delivered
- ☐ Fax

Remarks: _____

Telefax number: _____

Copies to: File

Number of pages (including this page): 13

Thanks – Jim Smith

Chain of Custody Record

10 X # 8 98 – 08 – 189
DUE DATE: 08-13-98

EST ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Laboratory: Toxikon (781) 275-3330

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency: ☒ Rush 2 Day Turnaround ☐ Routine

rush – 2 day turn

Client: Joseph P. McCabe, Inc.
Address: 509 East First Street
South Boston MA 02127-

Contact Name: Andrew McCabe
Phone Number: (617) 268-2030
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative	Analysis	Comments
Robinson Collector Grab	1	125 ml	B	2	8/11	1400	None	Total Coliform, Fecal Coliform	pH= 8.34
Robinson Collector Grab	1	~~1 L~~ 500 ml	P	1	"	"	H2SO4	NH3	Temp= 21.5C
Manhole L Grab	1	125	B	2	"	1425	None	Total Coliform, Fecal Coliform	pH= 9.18
Manhole L Grab	1	500	P	1	"	"	H_2SO_4	NH_3	Temp= 22.7°C
Canaday Sample	4	125	B	2	"	1435	None	Total Coliform, Fecal Coliform	pH= 8.80
Canaday Sample	4	500	P	1	"	"	H_2SO_4	NH_3	Temp= 21.1°C

SAMPLER'S SIGNATURE	DATE	TIME	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
	8/11/98	1900	1				
			2				
			3				
			4				

Additional Comments:
Site Contact: Jim Smith, Cell: (617) 839-1638

FROM JOANNA TO 16172681498 P013

Received: 08/11/98

TOXIKON CORP. REPORT
Test Methodology

Work Order # 98-08-189

TEST CODE F COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater. APHA-AWWA-WACF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T COLI NAME TOTAL COLI (COLILERT)

METHOD:PRESENCE-ABSENCE (P-A) COLIFORM TEST

Reference: Based on procedures set forth in Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WACF, 18th Edition, 1992. APHA Washington D.C.

Received: 08/11/98

TOXIKON CORP. REPORT Work Order # 98-08-189
Results by Sample

SAMPLE ID CANADAY SAMPLE SAMPLE # 06 FRACTIONS: A
Date & Time Collected 08/11/98 14:35:00 Category WATER

N_AMM 0.516
mg/L DL=0.04

Received: 08/11/98

TOXIKON CORP. REPORT

Results by Sample

Work Order # 98-08-189

SAMPLE ID CANADAY SAMPLE

FRACTION 05A TEST CODE T COLI NAME TOTAL COLI (COLILERT)

Date & Time Collected 08/11/98 14:35:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	<1

Notes and definitions for this report:

TEST DATE: 08/11/98

UNITS = cfu / 100ml

Page 8 TOXIKON CORP. REPORT Work Order # 98-08-189
Received: 08/11/98 Results by Sample

SAMPLE ID CANADAY SAMPLE FRACTION 05A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/11/98 14:35:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 08/11/98
UNITS = cfu / 100ml

Received: 08/11/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-189

SAMPLE ID MANHOLE L GRAB SAMPLE # 06 FRACTIONS: A
Date & Time Collected 08/11/98 14:25:00 Category WATER

N_AMM 0.966
mg/L DL=0.04

Received: 08/11/98

TOXIKON CORP. REPORT

Work Order # 98-08-189

Results by Sample

SAMPLE ID MANHOLE 1 GRAB

FRACTION USA TEST CODE T COLI NAME TOTAL COLI (COLILERT)

Date & Time Collected 08/11/98 14:25:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	170

Notes and definitions for this report:

TEST DATE: 08/11/98

UNITS = cfu / 100ml

Received: 08/11/98

TOXIKON CORP. REPORT

Results by Sample

Work Order # 98-08-189

SAMPLE ID MANHOLE 1 GRAB

FRACTION QSA TEST CODE F COLI NAME FECAL COLIFORM

Date & Time Collected 08/11/98 14:25:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	<10

Notes and definitions for this report:

TEST DATE: 08/11/98

UNITS = cfu / 100ml

Received: 08/11/98

TOXIKON CORP. REPORT

Work Order # 98-08-189

Results by Sample

SAMPLE ID ROBINSON COLLECTOR GRAB SAMPLE # 02 FRACTIONS: A

Date & Time Collected 08/11/98 14:00:00 Category WATER

N_AMM 1.06

mg/L DL=0.04

Received: 08/11/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-189

SAMPLE ID ROBINSON COLLECTOR GRAB FRACTION 01A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/11/98 14:00:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	9000

Notes and definitions for this report:
TEST DATE: 08/11/98
UNITS = cfu / 100ml

TOXIKON CORP. REPORT

Work Order # 98-08-189

Received: 08/11/98

Results by Sample

SAMPLE ID ROBINSON COLLECTOR GRAB FRACTION 01A TEST CODE E COLI NAME FECAL COLIFORM

Date & Time Collected 08/11/98 14:00:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	1150

Notes and definitions for this report:

TEST DATE: 08/11/98

UNITS = cfu / 100ml

Page 1

TOXIKON CORP. REPORT

Work Order # 98-08-189

Received: 08/11/98

08/14/98 14:33:19

REPORT JOSEPH P. McCABE,INC
TO 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127
617-268-2030
ATTEN ANDREW McCABE

PREPARED TOXIKON CORPORATION
BY 15 WIGGINS AVE
BEDFORD, MA 01730
ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY

CONTACT JOHNM

CLIENT MCCABE SAMPLES 6
COMPANY JOSEPH P. McCABE,INC
FACILITY 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127

MA CERT # M-MA064: TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, TNNs, VOC, PEST, NUTRIENTS, DEMAND, O&G, PHENOLICS, PCBs , CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 206091-C.

WORK ID HARVARD UNIVERSITY
TAKEN 8/11/98
TRANS
TYPE WATER
P.O. #
INVOICE under seperate cover

VERIFIED BY: Douglas Flaherty

SAMPLE IDENTIFICATION

01 ROBINSON COLLECTOR GRAB
02 ROBINSON COLLECTOR GRAB
03 MANHOLE 1 GRAB
04 MANHOLE 1 GRAB
05 CANADAY SAMPLE
06 CANADAY SAMPLE

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLI TOTAL COLI (COLILERT)

ENGINEERING & UTILITIES

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Larry Loverme	Larry Muench
COMPANY:	DATE:
Cambridge DPW	January 4, 1999
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
617-349-4868	13
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
617-349-4848	
RE:	YOUR REFERENCE NUMBER:
Harvard University Storm Drain Project – Test Number 2	

☐ FOR YOUR INFORMATION ☒ FOR REVIEW ☒ PLEASE COMMENT ☐ PLEASE REPLY

NOTES/COMMENTS

Larry,

Attached please find the storm drainage test results for the Emerson/Robinson Storm Drainage Project taken 12-03-98.

Test samples were taken at the same three locations as the previous test (Robinson 0+00, Pusey Forced Main, Pusey Sump) and the Fecal Coliform count at all three locations were below the 200-cfu/100ml limit.

The testing agency encountered some difficulty obtaining samples during the first test on 10-14-98 due to the configuration of the sample containers. After discussion with EST, they used different containers for the test on 12-03-98 and easily obtained test samples.

Please call me if you have any questions.

Thank you.

50 CHURCH STREET, 4TH FLOOR, CAMBRIDGE, MA 02138
TEL. 617.496.5090 FAX 617.496.1669

Page 1 TOXIKON CORP. REPORT Work Order # 98-12-060

Received: 12/03/98 12/21/98 09:46:38

REPORT TO
HARVARD UNIVERSITY ENG.
50 CHURCH STREET, 4TH FLOOR
CAMBRIDGE, MA 02139
617-495-5560
ATTEN LARRY MUENCH

PREPARED BY
TOXIKON CORPORATION
15 WIGGINS AVE
BEDFORD, MA 01730
ATTEN PAUL LEZBERG
PHONE (781)275-3330

CERTIFIED BY

CONTACT JAYSON

CLIENT HARVARD UNIV SAMPLES 6
COMPANY HARVARD UNIVERSITY ENG
FACILITY 50 CHURCH STREET, 4TH FLOOR
CAMBRIDGE, MA 02139

MA CERT # M-MA064: TRACE METALS, SULFATE, CYANIDE, RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST., NUTRIENTS. DEMAND. O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

WORK ID ROBINSON/PUSEY
TAKEN 12/3/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY:
CERT#MMA064

SAMPLE IDENTIFICATION

01 ROBINSON 0+00 GRAB
02 ROBINSON 0+00 GRAB
03 PUSEY SUMP GRAB
04 PUSEY SUMP GRAB
05 PUSEY FORCE MAIN GRAB
06 PUSEY FORCE MAIN GRAB

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLM TOTAL COLI (MEMBRANE FILT)

Received: 12/03/98 Results by Sample

SAMPLE ID ROBINSON 0+00 GRAB FRACTION 01A TEST CODE F_COLI NAME FECAL COLIFORM
Date & Time Collected 12/03/98 09:00:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	150

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Page 3 TOXIKON CORP. REPORT Work Order # 98-12-060
Received: 12/03/98 Results by Sample

SAMPLE ID ROBINSON 0+00 GRAB FRACTION 01A TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)
Date & Time Collected 12/03/98 09:00:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	270

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Page 4 TOXIKON CORP. REPORT Work Order # 98-12-060
Received: 12/03/98 Results by Sample

SAMPLE ID ROBINSON 0+00 GRAB SAMPLE # 02 FRACTIONS: A
Date & Time Collected 12/03/98 09:00:00 Category WATER

N_AMM	ND
mg/L	DL=0.04

Page 5 TOXIKON CORP. REPORT Work Order # 98-12-060
Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY SUMP GRAB FRACTION 03A TEST CODE F_COLI NAME FECAL COLIFORM
Date & Time Collected 12/03/98 09:45:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Page 6 TOXIKON CORP. REPORT Work Order # 98-12-060
Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY SUMP GRAB FRACTION 03A TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)
Date & Time Collected 12/03/98 09:45:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Page 7 TOXIKON CORP. REPORT Work Order # 98-12-060
Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY SUMP GRAB SAMPLE # 04 FRACTIONS: A
Date & Time Collected 12/03/98 09:45:00 Category WATER

N_AMM	ND
mg/L	DL=0.04

SAMPLE ID PUSEY FORCE MAIN GRAB FRACTION 05A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 12/03/98 09:20:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	140

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Page 9 TOXICON CORP. REPORT Work Order # 98-12-060
Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN GRAB FRACTION 05A TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)
Date & Time Collected 12/03/98 09:20:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	280

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Page 10 TOXIKON CORP. REPORT Work Order # 98-12-060
Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN GRAB SAMPLE # 06 FRACTIONS: A
Date & Time Collected 12/03/98 09:20:00 Category WATER

N_AMM	ND
mg/L	DL=0.04

TEST CODE F COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater.
APHA-AWWA-WACF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes.
EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)

STANDARD METHOD: 9222B

Reference: Standard Methods for Examination of Water and Wastewater.
APHA-AWWA-WACF. 17th Edition. 1989. APHA Washington D.C.

98-12-060

Chain of Custody Record

Laboratory: Toxikon (781) 275-3330

EST ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency: ☐ Rush ____ Day Turnaround ☐ Routine

WORK ORDER #: 98.12-.060
DUE DATE : 12-17-98

ient: Harvard University Engineering & Utilities
ldress: 50 Church Street, 4th Floor
Cambridge MA 02139-

Contact Name: Larry Muench
Phone Number: (617) 495-5560
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative	Analysis	Comments
binson 0+00 Grab (1)	1	~~125~~ 250 ml	B	~~2~~	12/3	0900	None	Total Coliform, Fecal Coliform	pH= 7.42
binson 0+00 Grab (2)	1	1 L	P	1	12/3	0900	H2SO4	NH3	Temp= 15.1°C
sey Sump Grab (3)	1	~~125~~ 250 ml	B	~~2~~	12/3	~~0920~~ 0945	None	Total Coliform, Fecal Coliform	pH= 7.59
sey Sump Grab (4)	1	1 L	P	1	12/3	~~0920~~ 0945	H2SO4	NH3	Temp= 17.7°C
sey Force Main Grab (5)	1	~~125~~ 250 ml	B	~~2~~ 1	12/3	~~0945~~ 0920	None	Total Coliform, Fecal Coliform	pH= 7.59
sey Force Main Grab (6)	1	1 L	P	1	12/3	~~0945~~ 0920	H2SO4	NH3	Temp= 20.1

SAMPLER'S SIGNATURE	DATE	TIME
Daniel Andrew	12/3/98	1200

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	Daniel Andrew	A. Whalen	12-7-98	12:45
2				
3				
4				
5				

dditional Comments:
ite Contact: Jim Smith, Cell: (617) 639-1638
COOLER TEMP = 3.8°C

* All samples chilled to 4 degrees Celsius.

01/04/99 16:48 6174961669 ENG & UTIL 013

rec'd on Thursday Jan 7, 1999.

Harvard University

ENGINEERING & UTILITIES

FACSIMILE TRANSMITTAL SHEET

TO: Larry Loverme	FROM: Larry Muench
COMPANY: Cambridge DPW	DATE: January 4, 1999
FAX NUMBER: 617-349-4868	TOTAL NO. OF PAGES INCLUDING COVER: 13
PHONE NUMBER: 617-349-4848	SENDER'S REFERENCE NUMBER:
RE: Harvard University Storm Drain Project – Test Number 2	YOUR REFERENCE NUMBER:

☐ FOR YOUR INFORMATION ☒ FOR REVIEW ☒ PLEASE COMMENT ☐ PLEASE REPLY

NOTES/COMMENTS

Larry;

Attached please find the storm drainage test results for the Emerson/Robinson Storm Drainage Project taken 12-03-98.

Test samples were taken at the same three locations as the previous test (Robinson 0+00, Pusey Forced Main, Pusey Sump) and the Fecal Coliform count at all three locations were below the 200-cfu/100ml limit.

The testing agency encountered some difficulty obtaining samples during the first test on 10-14-98 due to the configuration of the sample containers. After discussion with EST, they used different containers for the test on 12-03-98 and easily obtained test samples.

Please call me if you have any questions.

Thank you.

50 CHURCH STREET, 4TH FLOOR, CAMBRIDGE, MA 02138
TEL. 617.496.5090 FAX 617.496.1669

Received: 12/03/98 12/21/98 09:46:38

REPORT HARVARD UNIVERSITY ENG.
TO 50 CHURCH STREET, 4TH FLOOR
CAMBRIDGE, MA 02139
617-495-5560
ATTEN LARRY MUENCH

PREPARED TOXIKON CORPORATION
BY 15 WIGGINS AVE
BEDFORD, MA 01730

ATTEN PAUL LEZBERG
PHONE (781)275-3330

CERTIFIED BY

CONTACT JAYSON

CLIENT HARVARD UNIV SAMPLES 6
COMPANY HARVARD UNIVERSITY ENG
FACILITY 50 CHURCH STREET, 4TH FLOOR
CAMBRIDGE, MA 02139

MA CERT # M-MA064: TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST.,NUTRIENTS. DEMAND. O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

WORK ID ROBINSON/PUSEY
TAKEN 12/3/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY:
CERT#MMA064

SAMPLE IDENTIFICATION

01 ROBINSON 0+00 GRAB
02 ROBINSON 0+00 GRAB
03 PUSEY SUMP GRAB
04 PUSEY SUMP GRAB
05 PUSEY FORCE MAIN GRAB
06 PUSEY FORCE MAIN GRAB

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLM TOTAL COLI (MEMBRANE FILT)

Received: 12/03/98 Results by Sample

SAMPLE ID ROBINSON 0+00 GRAB FRACTION 01A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 12/03/98 09:00:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	150

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Received: 12/03/98 Results by Sample

SAMPLE ID ROBINSON 0+00 GRAB FRACTION 01A TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)
Date & Time Collected 12/03/98 09:00:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	270

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

SAMPLE ID ROBINSON 0+00 GRAB SAMPLE # 02 FRACTIONS: A
Date & Time Collected 12/03/98 09:00:00 Category WATER

N_AMM	ND
mg/L DL=0.04	

SAMPLE ID PUSEY SUMP GRAB FRACTION 03A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 12/03/98 09:45:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY SUMP GRAB FRACTION 03A TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)
Date & Time Collected 12/03/98 09:45:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY SUMP GRAB SAMPLE # 04 FRACTIONS: A
Date & Time Collected 12/03/98 09:45:00 Category WATER

N_AMM	ND
mg/L	DL=0.04

Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN GRAB FRACTION 05A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 12/03/98 09:20:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	140

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

Received: 12/03/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN GRAB FRACTION 05A TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)
Date & Time Collected 12/03/98 09:20:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	280

Notes and definitions for this report:
TEST DATE: 12/03/98
UNITS = cfu / 100ml

SAMPLE ID PUSEY FORCE MAIN GRAB SAMPLE # 06 FRACTIONS: A
Date & Time Collected 12/03/98 09:20:00 Category WATER

N_AMM	ND
mg/L	DL=0.04

TEST CODE F COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater.
APHA-AWWA-WACF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes.
EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T COLM NAME TOTAL COLI (MEMBRANE FILT)

STANDARD METHOD: 9222B

Reference: Standard Methods for Examination of Water and Wastewater.
APHA-AWWA-WACF. 17th Edition. 1989. APHA Washington D.C.

98-12-060

Chain of Custody Record

Laboratory: Toxikon (781) 275-3330

EST ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency: ☐ Rush _____Day Turnaround ☐ Routine

WORK ORDER #: 98.12.060
DUE DATE: 12.17.98

Client: Harvard University Engineering & Utilities
Address: 50 Church Street, 4th Floor
Cambridge MA 02139-

Contact Name: Larry Muench
Phone Number: (617) 495-5560
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative *	Analysis	Comments
obinson 0+00 Grab (1)	1	~~125~~ 250 ml	B	~~2~~	12/3	0900	None	Total Coliform, Fecal Coliform	pH= 7.42
obinson 0+00 Grab (2)	1	1 L	P	1	12/3	0900	H2SO4	NH3	Temp= 15.1°C
usey Sump Grab (3)	1	~~125~~ 250 ml	B	~~2~~	12/3	~~0920~~ 0945	None	Total Coliform, Fecal Coliform	pH= 7.59
usey Sump Grab (4)	1	1 L	P	1	12/3	~~0920~~ 0945	H2SO4	NH3	Temp= 17.7°C
usey Force Main Grab (5)	1	~~125~~ 250 ml	B	~~2~~	12/3	~~0945~~ 0920	None	Total Coliform, Fecal Coliform	pH= 7.49
usey Force Main Grab (6)	1	1 L	P	1	12/3	~~0945~~ 0920	H2SO4	NH3	Temp= 20.1

SAMPLER'S SIGNATURE	DATE	TIME	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
	12/3/98	1200	1			12-3-98	12:45
			2				
			3				
			4				
			5				

Additional Comments:
Site Contact: Jim Smith, Cell: (617) 839-1638
COOLER TEMP = 3.8C

* All samples chilled to 4 degrees Celsius.

recd from Larry Moench on Sept 2, 1998

TOXIKON

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Celebrating 20 Years of Excellence

FACSIMILE INSTRUCTION SHEET

Date: 9/1/98

Name: Andrew McCabe

Company: Joseph V. McCabe

Fax #:

From: Yuan Correira

Total No. of Pages Including Cover Sheet: 16

If you do not receive all of the pages, please call (617) 275-3330. Thank you. Notes:

STATEMENT OF CONFIDENTIALITY

This Facsimile transmission contains information from Toxikon. The information contained is confidential and/or privileged, and it is intended only for the use of the addressee named on the transmittal sheet. If you are not the intended addressee, please note that any disclosure, copying, distribution or use of this faxed information is prohibited. If you received this facsimile in error, please notify us immediately by telephone, so that we can arrange to retrieve the original documents without cost to you.

REMEMBER! CONTACT US IMMEDIATELY IF YOU ARE NOT THE INTENDED RECIPIENT.

15 Wiggins Avenue • Bedford, Massachusetts 01730
(781) 275-3330

98-08-577

Chain of Custody Record

EST ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Laboratory: Toxikon (781) 275-3330

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency: ☐ Rush ____Day Turnaround ☐ Routine

WORK ORDER #: 98-08-577
DUE DATE : 09-11-98

Client: Joseph P. McCabe, Inc.
Address: 509 East First Street
South Boston MA 02127-

Contact Name: Andrew McCabe
Phone Number: (617) 268-2030
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative	Analysis	Comments
(1) Rusey Sump	1	125 ml	B	2	8/28	1130	None	Total Coliform, Fecal Coliform	pH= 7.28
(2) " "	1	1 L	P	1	"	"	H2SO4	NH3	Temp= 68°F
(3) Rusey Force Main	1	125 ml	B	2	8/28	1140	None	Total Coliform, Fecal Coliform	pH= 7.37
(4)	1	1 L	P	1	"	"	H2SO4	NH3	Temp= 69°F
(5) Robinson 0700	1	125ml	B	2	8/28	1200	None	T. Col., Fecal Col.	pH= 7.61
(6) "	1	1L	P	1	"	"	H_2SO_4	NH_3	Temp=67°F
(7) Canady	1	125ml	B	2	8/28	1210	None	T. Col, Fecal Col	pH= 9.21
(8) "	1	1L	P	1	"	"	H_2SO_4	NH_3	Temp=65°F

SAMPLER'S SIGNATURE	DATE	TIME	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
[signature]	8/28/98	1700	1	[signature]	[signature]	8/28	13:15
			2				
			3				
			4				
			5				

Additional Comments:
Site Contact: Jim Smith, Cell: (617) 839-1636

*All samples chilled to 4 degrees Celsius.

SEP-01-1998 12:25 MCCABE COMPANIES 617 268 7498 P.02

Page 1
Received: 08/28/98

TOXIKON CORP. REPORT
09/01/98 09:06:09

Work Order # 98-08-577

REPORT JOSEPH P. McCABE INC
TO 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127
617-268-2050
ATTEN ANDREW McCABE

PREPARED TOXIKON CORPORATION
BY 15 WIGGINS AVE
BEDFORD, MA 01730

ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY

CONTACT JOANN

CLIENT MCCABE SAMPLES 8
COMPANY JOSEPH P. McCABE,INC
FACILITY 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127

MA CERT # M-MA046: TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Cr, TOTAL ALK., TDS, pH, TNHe, VOC, PEST.,NUTRIENTS, DEMAND, O&G, PHENOLICS, PCBs , CT DHS PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DW#256, SC #8002, NH 204091-C,

WORK ID HARVARD UNIVERSITY CONSTRUC.
TAKEN 8/28/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY:

SAMPLE IDENTIFICATION

01 PUSEY SUMP
02 PUSEY SUMP
03 PUSEY FORCE MAIN
04 PUSEY FORCE MAIN
05 ROBINSON 0+00
06 ROBINSON 0+00
07 CANADY
08 CANADY

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLI TOTAL COLI (COLILERT)

Page 2
Received: 08/28/98

TURICCHI CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUSEY PUMP

FRACTION 01A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 11:30:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	90

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 3
Received: 08/28/98

YORKTOWN CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUSEY SUMP

FRACTION DIA TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 11:30:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	>6000

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 4
Received: 08/28/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUMEY SUMP SAMPLE # 02 FRACTIONS: A
Date & Time Collected 08/28/98 11:30:00 Category WATER

M_ANN ND
MG/L DL=0.06

Page 5
Received: 08/28/98

TOXICON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID PUSEY FORCE MAIN FRACTION 03A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 11:40:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	1530

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 6
Received: 08/28/98

TOXICON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID FOREY FORCE MAIN FRACTION WSA TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 11:40:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	16000

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 7
Received: 08/28/98

TOKIMON CORP. REPORT Work Order # 98-08-577
Results by Sample

SAMPLE ID PUSEY FORCE MAIN SAMPLE # 06 FRACTIONS: A
Date & Time Collected 08/28/98 11:40:00 Category WATER

N_NNN ND
mg/L DL=0.04

Page 8
Received: 08/28/98

TEKTRON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID ROBINSON 0+00

FRACTION OSA TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 12:00:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	420

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 9
Received: 08/28/98

TOXICON CORP. REPORT Work Order # 98-08-577
Results by Sample

SAMPLE ID ROBINSON 0+00 FRACTION 05A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 12:00:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	61000

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 10
Received: 08/28/98

TEXTRON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID TEXTRON 0-00 SAMPLE # 06 FRACTIONS: A
Date & Time Collected 08/28/98 12:00:00 Category WATER

B [illegible] ND
mg/L Dl=0.06

Page 11
Received: 08/28/98

TOXICON CORP. REPORT Work Order # 98-08-577
Results by Sample

SAMPLE ID CANADY FRACTION 07A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/28/98 12:10:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	<10

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 12
Received: 08/28/98

TORIDON CORP. REPORT
Results by Sample

Work Order # 98-08-577

SAMPLE ID CANADY FRACTION 07A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/28/98 12:10:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	80

Notes and definitions for this report:
TEST DATE: 08/28/98
UNITS = cfu / 100ml

Page 13
Received: 08/28/98

TOXICON CORP. REPORT Work Order # 98-08-577
Results by Sample

SAMPLE ID CANADY SAMPLE # 05 FRACTIONS: A
Date & Time Collected 08/28/98 12:10:00 Category WATER

N_AMM 0.068
MG/L DL=0.04

TEST CODE F COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater. APHA-AWWA-WACF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T COLI NAME TOTAL COLI (COLILERT)

METHOD:PRESENCE-ABSENCE (P-A) COLIFORM TEST

Reference: Based on procedures set forth in Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WACF, 18th Edition, 1992. APHA Washington D.C.

recd from Jim Smith and Larry Muench on Tues Aug 25, 1998
Test #3 results

Transmittal Form

Joseph P. McCabe, Inc.
509 East First Street
So. Boston, MA 02127
617-268-2030

Date: 8-25-98
Company: Harvard Univ.
Attention: Larry Meutch
From: Jim Smith
Project name: Emerson/Robinson Drainage

Regarding: Water Testing

We are sending you:

	Copies	Date	Description
☐ As requested			
■ Attached	1	8-24-98	Test Results
☐ Under separate cover			

For your:

- ■ Records
- ■ Use and information
- ☐ Approval
- ☐ Review and comment
- ☐ Use and distribution

Memo:

Via:

- ☐ Overnight mail
- ☐ Mail
- ■ Hand delivered
- ☐ Fax

Remarks:

Telefax number:

Number of pages (including this page):

Copies to: File – Larry LaVerme

Thanks – Jim Smith

TOXIKON

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Excellence

FACSIMILE INSTRUCTION SHEET

Date: 8/24

Name: Andrew McCabe

Company:

Fax #:

From: Lynn C.

Total No. of Pages Including Cover Sheet: 7

If you do not receive all of the pages, please call (617) 275-3330.
Thank you. Notes:

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15 Wiggins Avenue • Bedford, Massachusetts 01730
(781) 275-3330

Page 1
Received: 08/18/98

TOXIKON CORP. REPORT
08/21/98 09:55:12

Work Order # 98-08-331

REPORT JOSEPH P. McCABE, INC
TO 509 EAST FIRST STREET
SOUTH BOSTON, MA 02127
617-268-2030
ATTEN ANDREW McCABE

PREPARED TOXIKON CORPORATION
BY 15 WIGGINS AVE
BEDFORD, MA 01730

ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY

CONTACT JOHNM

CLIENT MCCABE SAMPLES 2
COMPANY JOSEPH P. McCABE, INC
FACILITY 509 EAST FIRST STREET
SOUTH BOSTON, MA 02127

MA CERT # M-MA064; TRACE METALS, SULFATE, CYANIDE, RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST., NUTRIENTS, DEMAND, O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

WORK ID HARVARD UNIVERSITY CONSTRUCT
TAKEN 8/18/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY:

SAMPLE IDENTIFICATION

01 ROBINSON COLLECTOR GRAB 1
02 ROBINSON COLLECTOR GRAB 2

TEST CODES and NAMES used on this workorder

F COLI	FECAL COLIFORM
N AMM	NITROGEN AMMONIA
T COLI	TOTAL COLI (COLILERT)

Page 2
Received: 08/18/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-331

SAMPLE ID ROBINSON COLLECTOR GRAB 1 FRACTION 01A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/18/98 08:00:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	2510

Notes and definitions for this report:
TEST DATE: 08/18/98
UNITS = cfu / 100ml

Page 3
Received: 08/18/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-331

SAMPLE ID ROBINSON COLLECTOR GRAB 1 FRACTION 01A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/18/98 08:00:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	112000

Notes and definitions for this report:
TEST DATE: 08/18/98
UNITS = cfu / 100ml

Received: 08/18/98 TOXIKON CORP. REPORT Work Order # 98-08-331
Results by Sample

SAMPLE ID ROBINSON COLLECTOR GRAB 2 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 08/18/98 08:00:00 Category WATER

N_AMM	ND
mg/L	DL=0.04

98-08-331

Chain of Custody Record

EST
ENVIRONMENTAL SAMPLING TECHNOLOGY

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Laboratory: Toxikon (781) 275-3330

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency:
☐ Rush
____ Day Turnaround
☒ Routine

WORK ORDER #: 98.08.331
DUE DATE : 08.31.98

ent: Joseph P. McCabe, Inc.
dress: 509 East First Street
South Boston MA 02127-

Contact Name: Andrew McCabe
Phone Number: (617) 268-2030
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative *	Analysis	Comments
]inson Collector Grab (1)	1	125 ml	B	2	8/18	800	None	Total Coliform, Fecal Coliform	pH= 7.45
]inson Collector Grab (2)	1	1 L	P	1	"	"	H2SO4	NH3	Temp=24.7°C

SAMPLER'S SIGNATURE	DATE	TIME
	8/18/98	810

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1		A. Morlas/LAB	8/18/98	12:40
2				
3				
4				
5				

litional Comments:
Contact: Jim Smith, Cell: (617) 839-1638

*All samples chilled to 4 degrees Celsius.

Aug. 24 1998 10:02AM P6

ltr

rec'd Thursday Aug 22, 1998 from Larry Meutch and Jim Smith Test Results #4

Transmittal Form

Joseph P. McCabe, Inc.
509 East First Street
So. Boston, MA 02127
617-268-2030

Date: 8-27-98
Company: Harvard University
Attention: Larry Meutch
From: Jim Smith
Project name: Emerson/Robinson Drainage

Regarding: Storm Water Testing --- Test of 8-24-98

We are sending you:

	Copies	Date	Description
☐ As requested			
■ Attached			
☐ Under separate cover			

For your:

- ☐ Records
- ■ Use and information
- ☐ Approval
- ☐ Review and comment
- ☐ Use and distribution

Memo:

Via:

- ☐ Overnight mail
- ☐ Mail
- ■ Hand delivered
- ☐ Fax

Remarks:

Telefax number:

Copies to: File – Larry LeVerme

Number of pages (including this page):

Thanks – Jim Smith

Page 1 TOXIKON CORP. REPORT Work Order # 98-08-460
Received: 08/24/98 08/26/98 12:29:22

REPORT TO: JOSEPH P. McCABE,INC
509 EAST FIRST STREET
SOUTH BOSTON,MA 02127
617-268-2030
ATTEN ANDREW McCABE

PREPARED BY: TOXIKON CORPORATION
15 WIGGINS AVE
BEDFORD, MA 01730
ATTEN PAUL LEZBERG
PHONE (617)275-3330

CERTIFIED BY
CONTACT JOHNM

CLIENT MCCABE SAMPLES 4
COMPANY JOSEPH P. McCABE,INC
FACILITY 509 EAST FIRST STREET
SOUTH BOSTON,MA 02127

MA CERT # M-MA064: TRACE METALS, SULFATE,CYANIDE,RES. FREE CHLORINE, Ca, TOTAL ALK., TDS, pH, THMs, VOC, PEST.,NUTRIENTS, DEMAND, O&G, PHENOLICS, PCBs . CT DHS #PH-0563, NY #10778 FL HRS E87143, NJ DEP 59538, NC DNR286, SC 88002, NH 204091-C.

WORK ID HARVARD UNIVERSITY CONST.
TAKEN 8/24/98
TRANS
TYPE WATER
P.O. #
INVOICE under separate cover

VERIFIED BY:

SAMPLE IDENTIFICATION

01 ROBINSON 0+00 1
02 ROBINSON 0+00 2
03 PUSEY FORCE MAIN 3
04 PUSEY FORCE MAIN 4

TEST CODES and NAMES used on this workorder

F COLI FECAL COLIFORM
N AMM NITROGEN AMMONIA
T COLI TOTAL COLI (COLILERT)

Page 2 TOXIKON CORP. REPORT Work Order # 98-08-460
Received: 08/24/98
Results by Sample

SAMPLE ID ROBINSON 0+00 1 FRACTION 01A TEST CODE F_COLI NAME FECAL COLIFORM
Date & Time Collected 08/24/98 10:30:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	120

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

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Received: 08/24/98 Results by Sample

SAMPLE ID ROBINSON 0+00 1 FRACTION 01A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/24/98 10:30:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	11200

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

Received: 08/24/98

TOXIKON CORP. REPORT Work Order # 98-08-460
Results by Sample

SAMPLE ID ROBINSON 0+00 2 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 08/24/98 10:30:00 Category WATER

N_AMM 0.621
g/L DL=0.04

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Received: 08/24/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN 3 FRACTION 03A TEST CODE F COLI NAME FECAL COLIFORM
Date & Time Collected 08/24/98 10:45:00 Category WATER

FECAL COLIFORM

	RESULT
FECAL COLIFORM.....	890

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

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Received: 08/24/98

TOXIKON CORP. REPORT
Results by Sample

Work Order # 98-08-460

SAMPLE ID PUSEY FORCE MAIN 3 FRACTION 03A TEST CODE T COLI NAME TOTAL COLI (COLILERT)
Date & Time Collected 08/24/98 10:45:00 Category WATER

TOTAL COLIFORM

	RESULT
TOTAL COLIFORM.....	27800

Notes and definitions for this report:
TEST DATE: 08/24/98
UNITS = cfu / 100ml

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Received: 08/24/98 Results by Sample

SAMPLE ID PUSEY FORCE MAIN 4 SAMPLE # 04 FRACTIONS: A
Date & Time Collected 08/24/98 10:45:00 Category WATER

N_AMM 0.208
mg/L DL=0.04

TEST CODE F_COLI NAME FECAL COLIFORM

STANDARD METHOD: 9222D

Reference: Standard Methods for Examination of Water and Wastewater. APHA-AWWA-WACF. 18th Edition. 1992. APHA Washington D.C.

TEST CODE N_AMM NAME NITROGEN AMMONIA

EPA METHOD: 350.1

Reference: Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020 (Revised, March 1983). EPA/EMSL.

TEST CODE T_COLI NAME TOTAL COLI (COLILERT)

METHOD:PRESENCE-ABSENCE (P-A) COLIFORM TEST

Reference: Based on procedures set forth in Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WACF, 18th Edition, 1992. APHA Washington D.C.

98-08-460

Chain of Custody Record

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02494
Phone (781) 455 - 0003
Fax (781) 455 - 8336

Laboratory: Toxikon
(781) ~~275~~-3330

Container Type
P - Plastic
G - Glass
V - VOA
B - Bacteria

Sample Type
1. Wastewater
2. Groundwater
3. Soil
4. Drinking Water
5. Surface Water
6. Other _____

Sampling Frequency:
☒ Rush
2 Day Turnaround
☐ Routine

WORK ORDER #: 98.08.460
DUE DATE: 08.26.98

Client: Joseph P. McCabe, Inc.
Address: 509 East First Street
South Boston MA 02127-

Contact Name: Andrew McCabe
Phone Number: (617) 268-2030
Description: Harvard University Construction

LOCATION (Sample Identification)	Sample Type	Container Size	Container Type	Container #	Sampling Date	Sampling Time	Preservative *	Analysis	Comments
ROBINSON Ø+ØØ (1)	1	125 ml	B	2	8/24/98	1030	None	Total Coliform, Fecal Coliform	pH= 7.10
ROBINSON Ø+ØØ (2)	1	1 L	P	1	"	"	H2SO4	NH3	Temp= 18.8C
POSEY FORCE MAIN (3)	1	125 ml	B	2	8/24/98	1045	None	Total Coliform, Fecal Coliform	pH= 7.10
POSEY FORCE MAIN (4)	1	1 L	P	1	"	"	H2SO4	NH3	Temp= 17.5°C

SAMPLER'S SIGNATURE	DATE	TIME
Will. C.	8/24/98	1107

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	Will. C.	L. Mahan-Lupo	8-24	13:25
2			98	
3				
4				
5				

Additional Comments:
Site Contact: Jim Smith, Cell: (617) 839-1638

* All samples chilled to 4 degrees Celsius.

FROM : TOXIKON
PHONE NO. : 6172711135
Aug. 26 1998 03:21PM P10